

CLAIMS:

1. A sound source, comprising:
an input (104) for receiving an input audio signal;
an input (106) for receiving a sense signal depending on an ambient condition independent of sound; and
a dynamic range control (102) that automatically adjusts the dynamic range of the input audio signal to provide an output audio signal, the adjusting depending on the sense signal; and
a loudspeaker (112) that converts an output audio signal to ambient sound waves.
2. The sound source of claim 1, wherein:
the input is selected from one or more of: a demodulator/tuner (124) for providing a baseband audio signal from a modulated broadcast signal from cable, satellite or antenna; a reader (206) for providing the audio signal from a record carrier; and a network connection (208).
3. The sound source of claim 1, wherein the dynamic range adjustment is switched between discrete predetermined levels of dynamic range adjustment depending on the sense signal.
4. The sound source of claim 3, wherein depending on the sense signal, in some cases the dynamic range of the output signal is identical to the dynamic range of the input signal and in other cases the dynamic range of the output signal is substantially less than the dynamic range of the input signal.
5. The sound source of claim 1, wherein the automatic dynamic range control provides substantially continuous variation in the level of adjustment of the dynamic range of the output audio signal depending on substantially continuous variations in the sense signal.

6. The sound source of claim 1 wherein the sound independent ambient condition is a time of day.
7. The sound source of claim 1 wherein the sound independent ambient condition is the ambient light level.
8. The sound source of claim 1 wherein the input audio signal is music and the sound independent ambient condition is the genre of the music.
9. The sound source of claim 1 wherein the sound independent ambient condition is the location of the sound source.
10. The sound source of claim 1 wherein the sound independent ambient condition is the acoustic properties at the location of the sound source.
11. The sound source of claim 1 wherein multiple sensors provide one or more sense signals depending on multiple ambient conditions and the dynamic range control adjusts the dynamic range depending on the one or more sense signals.
12. A method, comprising:
 - receiving an input audio signal;
 - receiving a sense signal depending on an ambient condition independent of sound;
 - automatically adjusting the dynamic range of the input audio signal to provide an output audio signal, the adjusting depending on the sense signal; and
 - converting the output audio signal to ambient sound waves.
13. An sound source, comprising:
 - an input for receiving an input audio signal;
 - an input for receiving a first sense signal depending on a condition, the condition being an ambient sound noise level;

an input for receiving a second sense signal depending on another different condition;

a dynamic range control that automatically adjusts the dynamic range of the input audio signal to provide an output audio signal, the adjusting depending on the first and the second sense signals; and

a loudspeaker for converting the output audio signal to ambient sound waves.

14. The sound source of claim 13, wherein the other condition is related to sound.

15. The sound source of claim 13, wherein the other different condition is a volume setting of the sound source.

16. The sound source of claim 13, wherein the other different condition is the dynamic range of the input audio signal.

17. A sound source, comprising:

an input for receiving an input audio signal;

an input for receiving a sense signal depending on an external condition independent of sound; and

a dynamic range control that automatically adjusts the dynamic range of the input audio signal to provide an output audio signal, the adjusting depending on the sense signal; and

a loudspeaker that converts an output audio signal to ambient sound waves.

18. The sound source of claim 17, wherein the sound independent external condition is the identity of the audience.

19. The sound source of claim 17 wherein the sound independent external condition is distance between a loudspeaker and an audience.

20. The sound source of claim 17 wherein the sound independent external condition is the location of the sound source.

21. The sound source of claim 17 wherein the sound independent external condition is the source of the input audio signal.